

# EXHIBIT 19

**DECLARATION OF KATIE TRACY**

I, Katie Tracy, declare as follows:

1. I am the Executive Director, Sponsored Projects at University of Nevada, Reno (“UNR” or “University”) in Reno, Nevada. I have held that position since 2023.

2. As Executive Director, I have personal knowledge of the contents of this declaration or have knowledge of the matters based on my review of information and records gathered by UNR personnel, and could testify thereto.

3. UNR receives substantial annual funding from the United States Department of Energy (“DOE”). The current Department of Energy portfolio includes 48 active awards, with a total authorized award amount of approximately \$41.3 million. Of this total, over \$9 million represents authorized indirect costs.

4. The funding UNR receives from DOE supports critical and cutting-edge research, which millions of Americans benefit from and depend on. For example:

- a. The University’s research in nuclear materials and national security includes projects such as: thermal response prediction at the Nevada National Security Site; wirelessly-powered sensors for spent fuel canisters; and seismic risk assessment for nuclear storage. These efforts aim to improve the safety, monitoring, and resilience of nuclear infrastructure, directly supporting public safety and national preparedness.
- b. From developing low-impact lithium extraction methods to accelerating rare earth separation and enhancing recovery from mine tailings, University researchers are innovating critical mineral technologies essential for clean energy. These projects ensure more sustainable and domestically-secure

sources of materials used in everything from electric vehicles to national defense systems.

- c. DOE-funded environmental research at the University includes *geothermal exploration, phytoremediation of coal-impacted soils, and optimization of excess solar and battery storage*. This work supports the development of low-carbon technologies, restoration of contaminated ecosystems, and improved grid reliability — ultimately contributing to a more sustainable and resilient future for communities.
- d. The University's DOE portfolio includes cutting-edge work in quantum dynamics and high-energy density (HED) plasmas, such as *optical-gating of spin-based quantum states, quantum molecular systems, and electron-ion equilibration in dense plasmas*. These foundational physics and chemistry studies advance national capabilities in quantum information science and fusion research, with future applications in energy, computing, and defense.
- e. Several projects investigate how materials behave in extreme environments, including *opacity experiments at Z-machine, and magnetohydrodynamic instabilities under intense currents*. These studies inform the design and safety of critical infrastructure, experiments that inform nuclear stockpile management, to advanced materials for energy systems. Ultimately, these research projects will benefit both national security, and national infrastructure resiliency.

5. Indirect costs are essential for supporting this research. The DOE's proposal to cut indirect cost rates to 15% would end or seriously jeopardize all of the research projects described in paragraph 4.

6. Indirect costs include uses to construct and maintain state-of-the-art facilities necessary to meet the technical demands of advanced scientific work, such as laboratories for nuclear materials research or user facilities like ZNetUS. They also cover the procurement, calibration, and maintenance of specialized equipment — including systems like easyXAFS and plasma diagnostics — and support essential infrastructure, such as secure IT systems, utilities, safety compliance, and technical staff, who keep research environments operational. Together, these investments ensure that faculty and students have the robust institutional backbone needed to deliver impactful, compliant, and forward-looking research. Without this equipment, we cannot conduct the research.

7. For example, with respect to the areas of research described in Paragraph 4:

- a. The University's research in nuclear materials and national security includes projects such as *thermal response prediction at the Nevada National Security Site*, *wirelessly-powered sensors for spent fuel canisters*, and *seismic risk assessment for nuclear storage*. This work requires specialized equipment, such as high-temperature furnaces, dry storage monitoring systems, and geotechnical shaking tables capable of simulating seismic events to assess material and facility performance under extreme conditions.
- b. From developing low-impact lithium extraction methods to accelerating rare earth separation and enhancing recovery from mine tailings, University researchers are innovating critical mineral technologies essential for clean

energy. This research relies on access to high-pressure autoclaves, X-ray diffraction (XRD) instruments, electron microscopes, and laboratory-scale reactors used to simulate industrial separation and recovery processes under controlled conditions.

- c. DOE-funded environmental research includes *geothermal exploration*, *phytoremediation of coal-impacted soils*, and *optimization of solar and battery storage*. These projects require the use of deep-earth imaging systems, soil analysis instrumentation, and battery performance testing platforms, as well as access to field-scale test beds and remote sensing technology to evaluate real-world environmental performance and energy storage integration.
- d. Projects such as *optical-gating of spin-based quantum states* and *electron-ion equilibration in dense plasmas* advance frontier research in quantum sensing and high-energy density physics. This work demands cryogenic systems, ultrafast lasers, superconducting magnets, and access to large-scale plasma diagnostics facilities to analyze quantum-level behaviors and fusion-relevant phenomena under intense conditions.
- e. Investigations into material response under high current, opacity measurements at the Z-machine aim to understand nature at its most fundamental level while also helping train the next generation of scientists and engineers. These research projects use high-energy pulse generators, spectrometers, and computational modeling clusters. In addition, projects in UNR's Earthquake Engineering Laboratory are studying and helping develop the next generation of resilient infrastructure. These research projects use advanced servo-controlled shaking

tables, which replicate dynamic environmental conditions to test material limits and validate predictive models.

8. Physical space costs are one of the largest components of indirect costs, and the amount of space available to researchers has a direct and obvious impact on the amount of research that can be done at UNR. At the University, DOE-funded projects are supported by existing research facilities, such as the Fleischmann Planetarium (home to astrophysics outreach and modeling tools), the Nevada Terawatt Facility (used for high-energy-density physics and plasma research), the Mackay Mines Building and Lab Complex (supporting critical minerals and geothermal resource investigations), and the Davidson Mathematics and Science Center, which hosts computational modeling and spectroscopy labs. While no new research buildings are currently under construction, the sustained operation of these existing facilities is essential. Without indirect cost recovery, UNR risks facing higher deferred maintenance costs, equipment obsolescence, and limitations on lab access – all of which could stall cutting-edge DOE research, reduce hands-on opportunities for students, and weaken the university's ability to compete for future federal awards.

9. In addition, indirect costs fund the administration of awards, including staff who ensure compliance with a vast number of regulatory mandates from agencies such as DOE. These mandates serve many important functions, including: ensuring research integrity; properly managing and disposing of chemical and biological agents used in research; preventing financial conflicts of interest; managing funds; preventing intellectual property, technologies, or national security expertise from being inappropriately accessed by foreign adversaries; and providing the high level of cybersecurity, data storage, and computing environments mandated for regulated data.

10. Recovery of UNR's indirect costs is based on predetermined rates that have been contractually negotiated with the federal government.

11. Through fiscal year June 30, 2025, the predetermined indirect cost rates are 47% for on-campus research projects.

12. The impact of a reduction in the indirect cost rate would be devastating. Of the \$41.3 million in DOE funding that UNR received in the past few years, approximately \$22.9 million was allocated for direct costs, \$9.3 million for subcontracts (which are not eligible for overhead recovery), and over \$9.0 million for indirect costs. Similarly, in fiscal year 2025, UNR expects to receive \$5.7 million in DOE funding for direct costs, while \$2.1 million is allocated for indirect costs. And over the next five years, UNR anticipates receiving an average of \$8.1 million per year from the DOE for direct costs. Based on the predetermined indirect cost rate of 47%, which was negotiated with and approved by the federal government as of 2020, the University expects to receive approximately \$2.7 million per year in indirect cost recovery.

13. If, contrary to what UNR has negotiated with the federal government, the indirect cost rate is reduced to 15%, that would reduce the University's anticipated annual indirect cost recovery by \$1.8 million to \$900,000, a 50% drop.

14. This reduction will have deeply damaging effects on UNR's ability to conduct research from day one. Most critically, it will necessarily and immediately result in staffing reductions across the board. For example:

- a. The Office of Sponsored Projects and Grants and Contracts Accounting teams provides financial oversight, audit documentation, and conduct reporting required by the Department of Energy. Reductions in these areas would delay award setup, invoicing, and compliance submissions.

- b. In addition, technical staff who support facilities like the Nevada Terawatt Facility or the Mackay Mines labs, such as safety officers, lab technicians, and equipment specialists, would likely have their positions reduced or eliminated. This would compromise safe operations and slow experimental progress. These impacts would not only delay current projects but also lead to loss of funding, missed deadlines, or disqualification from future awards due to noncompliance or lack of institutional capacity.

15. UNR has, for decades, relied upon the payment of indirect costs. And, until now, has been able to rely on the well-established process for negotiating indirect cost rates with the government to inform our budgeting and planning. Operating budgets rely on an estimate of both direct and indirect sponsored funding to plan for annual staffing needs (*e.g.*, post-docs, PhD students, and other research staff), infrastructure support (*e.g.*, IT networks, regulatory compliance, and grant management support), and facility and equipment purchases. In some cases, UNR has long-term obligations—for example, multi-year support packages for admitted PhD students, tenure-track faculty salary coverage, and faculty startup packages that rely on planned reimbursements from grant-funded indirect costs—that rely on budgeted grant funding, including associated indirect cost recovery, to fulfill these commitments.

16. In addition to the immediate impacts and reliance interests described above, there are longer term impacts that are both cumulative and cascading. As staff and technical personnel positions are lost, key functions, such as laboratory safety monitoring, radioactive material handling, cybersecurity, and compliance enforcement, will be compromised. This raises serious concerns about regulatory violations, environmental hazards, and risks to personnel working in high-energy and nuclear-research environments. In addition, if research programs were forced to



pause due to lack of operational support, many could not be easily restarted, even if funding were later restored. Complex DOE projects involving specialized instrumentation, hazardous materials protocols, or long-term student and faculty commitments often require months of preparation and coordination; restarting them from a non-operational state would mean re-certifying labs, rehiring or retraining staff, reestablishing security clearances, and navigating sponsor re-approval processes. These barriers could lead to permanent program closures, loss of research talent, and reputational damage that undermines UNR's ability to compete nationally for future funding.

17. Disruptions to UNR's research will also have negative effects in the Reno area, the state of Nevada, and the broader region. Nearly 11,000 of Nevada residents worked at UNR, which collaborates with state and local partners to help solve regional challenges through joint research projects and innovation to make people's lives better. UNR's research also fuels spending in the regional economy, including by driving discoveries that launch new ventures, attract private investment, and make a positive social impact. A massive reduction in UNR's research budget would immediately and seriously jeopardize these contributions to the local region.

18. Finally, slowdowns or halts in research by UNR and other American universities will allow competitor nations that are maintaining their investments in research to surpass the United States on this front, threatening both our Nation's national security and its economic dominance.

19. Nor can UNR cover the funding gap itself. While UNR maintains an endowment, it is neither feasible nor sustainable for UNR to use endowment funds or other revenue sources to offset shortfalls in indirect cost recovery, for several reasons:

- a. The majority of UNR's endowment, approximately 95%, is restricted to specific donor-designated purposes, such as scholarships, faculty chairs, and

academic programs. UNR is not legally permitted to use those funds to cover research infrastructure costs.

- b. Even the portion of the endowment that is unrestricted is subject to a carefully managed annual payout, typically around 4.5%, to ensure long-term financial stability for the institution.
- c. As a non-profit institution, UNR reinvests nearly all of its revenue into mission-critical activities, leaving little margin to absorb unexpected funding gaps. In other words, unlike for-profit organizations, UNR does not generate significant surpluses that could be redirected without impacting core academic priorities such as educational programs and financial aid support for students.

20. Moreover, absorbing the cost of a lower indirect cost rate, even if it were possible, would create long-term budget pressures on UNR—which would, in turn, force reductions in key investments supporting UNR’s faculty, students, staff, research, and teaching infrastructure, as well as other critical activities needed to maintain UNR’s academic excellence.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on Sunday, April 13, 2025, at Reno, NV.



---

Katie Tracy  
Executive Director, Sponsored Projects  
University of Nevada, Reno